SERVICE MANUAL

MODEL NO.

REMOTE CONTROL SET

RC-R200Y





Code No. 22-200-000-34

REMOTE CONTROL SET RC-R500H,HU,E,K,G



DATE OF ISSUE 12/1981

SPECIFICATIONS

3	C.	-	2	a	n
-		75		8 0	4.8

16 diodes,

500a

4 ICs, 9 transistors,

DC 9V (DC 7.2V ~ 10V)

31 (W) x 110 (H) x 230 (D) mm

Carrier 37.91 kHz ± 170 kHz

Standard OSC frequency 455 kHz ± 2 kHz

Semiconductors:

Power supply: Dimensions:

Weight: OSC frequency:

Distance:

Transmission field:

≪ Wireless transmitter section ≫

Semiconductors: Power supply:

Current consumption: Dimensions: Weight:

Transmission field: Transmission distance: OSC frequency:

2 ICs, 2 transistors 2 diodes, 2 LEDs

±20° (2m)

DC 3V (3.2V ~ 2.4V) 64 (W) x 21 (H) x 134 (D) mm

approx. 5m (15 feet)

100g ±20° (2m) approx. 5m

Standard OSC frequency 455 kHz ± 2 kHz

Carrier 37.91 kHz ± 170 Hz

Semiconductors:

Power supply:

56 diodes, 8 LED H, HU model

AC 110 ~ 120/220 ~ 240V Switchable, 50/60 Hz

17ICs. 25 transistors.

E model AC 220 V 50 Hz K, G model AC 240V

RC-R500

50 Hz 10 W

250 (W) x 71 (H) x 241 (D) mm

2.3 kg

Frequency response: Total harmonic distortion: Less than 0.7% (1 kHz)

S/N ratio:

Power consumption:

Dimensions:

Weight:

Distance:

Inputs:

10 \sim 50 kHz ($^{+0.5}_{-3}$ dB)

More than 55 dB (PHONO 1) More than 55 dB (TUNER) More than 55 dB (AUX 1) approx. 5 m

150 mV/47 kΩ (PHONO 1, TUNER, AUX 1,

TAPE INPUT 1) 150 mV/47 kΩ Outputs: (TAPE OUTPUT 1) 150 V/47 kΩ (OUTPUT)

≪ Wireless transmitter section ≫

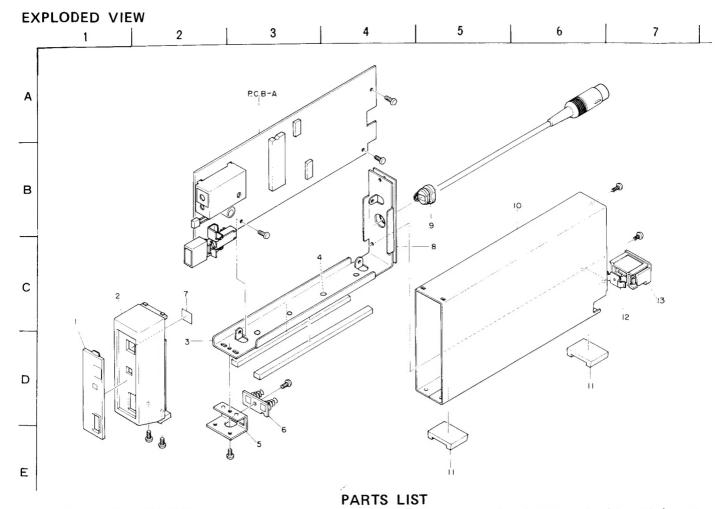
2 ICs, 2 transistors, Semiconductors: 2 diodes, 2 LEDs

Power supply: DC 3V (3.2V ~ 2.4V) 30 μA 63 (W) x 22 (H) x 141.5 (D) mm Current consumption: Dimensions:

Weight: 100 g ±20° (2m) Transmission field: Transmission distance: approx. 5 m

OSC. frequency: Standard OSC, frequency 455 kHz 2 kHz Carrier 39.91 kHz ± 170 Hz.

The specifications and external appearance of this setare subject to change without prior notice.



MECHANICAL PARTS

* mark in this part list shows exclusive part.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1	86-199-012-01		Window	*	1	
2	86-199-010-01		Panel, Front	*	1	
3	86-199-201-01		Chassis, Amp.	*	1	
4	86-199-202-01		Holder, Battery	*	1	
5	86-199-203-01		Guide, Battery	*	1	
6	86-199-205-01		C-spring	*	2	
7	86-199-206-01		Plate	*	1	
8	86-199-017-01		Jack plate	*	1	
9	86-199-208-01		Cord bushing	*	1	
10	86-199-011-01		Cabinet, Steel	*	1	
11	86-199-014-01		Rubber foot	*	2	
12	86-199-207-01		Battery terminal	*	1	
13	86-199-013-01		Battery room lid	*	1	

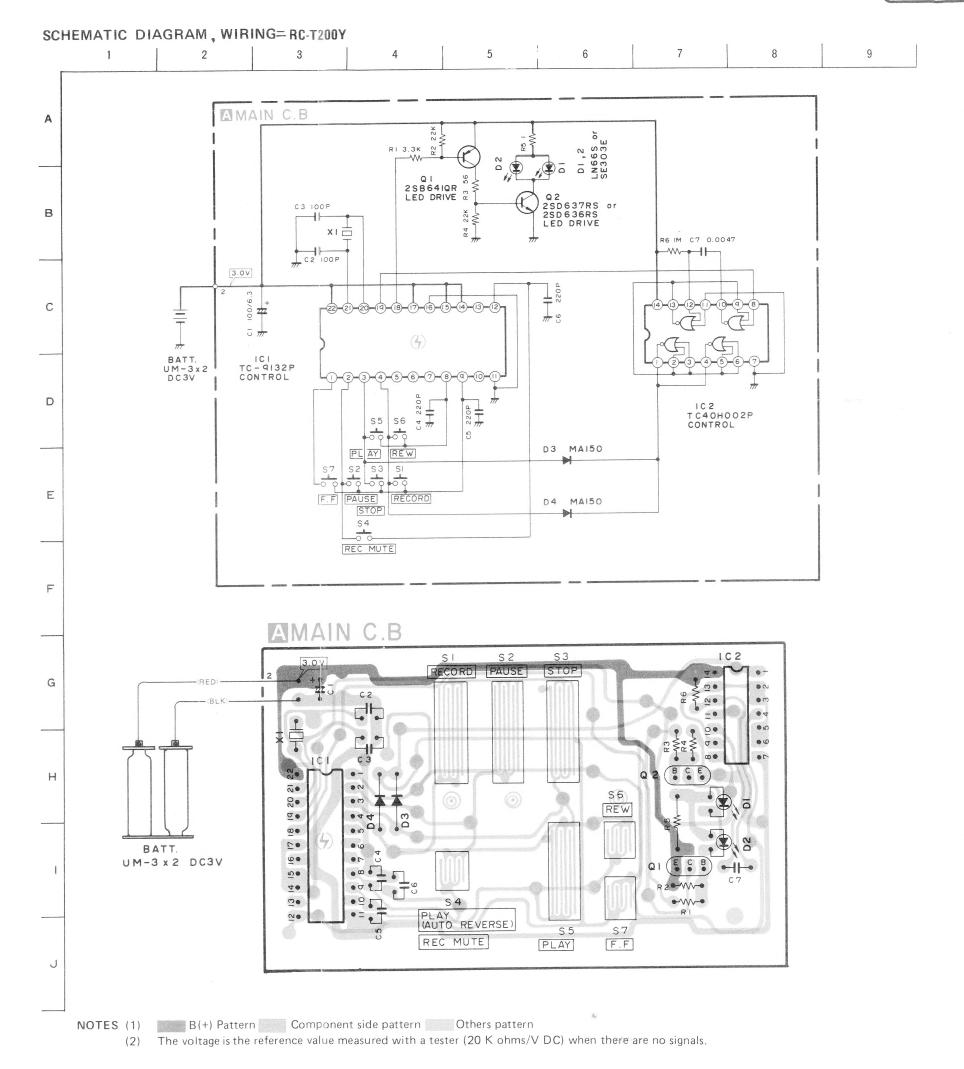
ELECTRICAL MAIN PARTS LIST

Symbol No.	Part No.	Description
≪ MAIN CIR	CUIT BOARD	SECTION ≫
PCB-A	86-199-610-01	Main circuit board
IC1	87-027-826-01	IC, μPC1373H
%) IC2	87-027-828-01	IC, TC9134P
IC3,4	87-027-827-01	IC, TC4069UBP
Q1,2,3,4,	89-318-054-01	Transistor, 2SC1815(Y)
5,6,7,8,		
9		
D1	87-026-186-01	Photo diode PIN PN313
D2	88-051-060-01	Diode, IN60
D3	87-027-369-01	Zener diode, 05Z6.2L
D5,6,7,8	87-027-097-01	Diode, 1S1555
9,10,11,12,		
13,14,15,16		
17		
L1	87-003-067-01	Choke coil, 5mH
X1	87-008-247-01	Ceramic, KBR455B
S1	87-031-694-01	Push-switch (POWER)
≪ MISCELLA	NEOUS ≫	
J1	86-199-601-01	8P DIN plug ass'y
01	86-199-208-01	Cord bushing
	86-198-800-01	Remote control transmitter
		RC-T200

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

- Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and denosit
- To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
- 3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
- 4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (🌓).



A

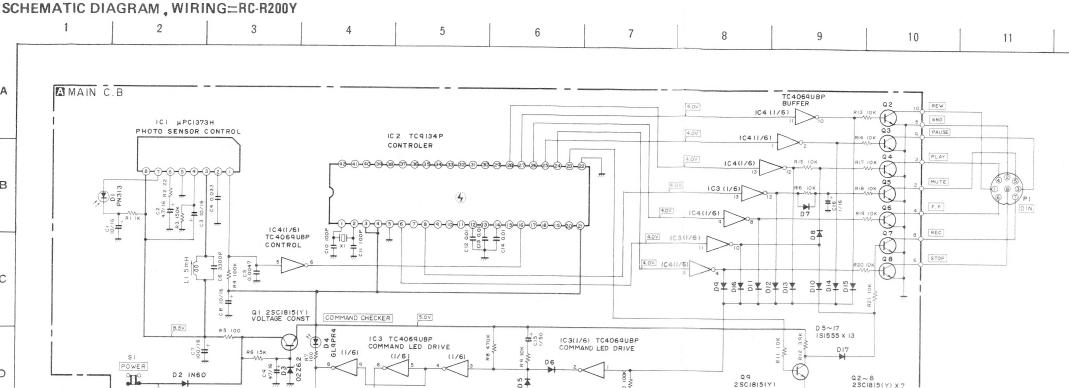
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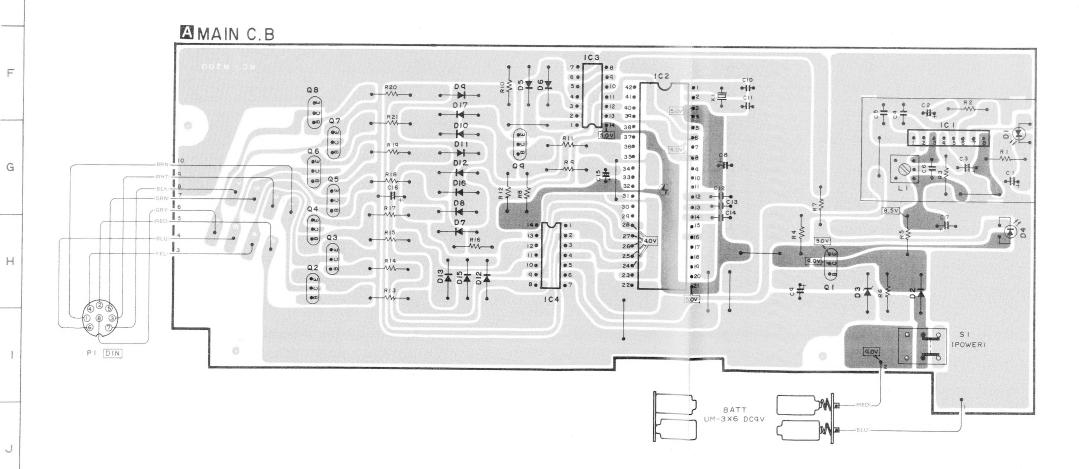
D

E

BATT UM-3X6 DC 9



IC3,4 PIN EARTH PIN 5V



NOTES:

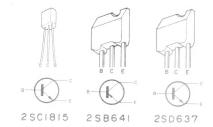
RC-R200Y

- 1) B (+) power supply
- 2) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- 3) Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
- 4) Capacitors with no designation have a dielectire strneght of less than 50WV.
- 5) The only capacitor tolerance indicated are $\pm 5\%$ (J) and $\pm 10\%$ (K).
- 6) Ceramic capacitor symbols:
- For temperature compensation (SL)
- High dielectric constant system (YY)
- → High dielectric constant system (YW, YP, YZ)
- Semiconductor ceramic
- 7) Explanation of symbols
- Mylar capacitor
- This schematic diagram is subject to change without notice in the interests of improved performance.

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

- 1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and
- 2. To use solder iron less than 40W (less than 260° C) of power consumption for soldering. But do not overheat more than 10
- 3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
- 4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (4)).



NOTES (1) B(+) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

ELECTRICAL MAIN PARTS LIST

ELECTRICAL MAIN PARTS LIST						
Symbol No.	Part No.	Description				
≪MAIN CIF	RCUIT BOARD	SECTION ≫ Main circuit board				
IC4	87-027-830-01	IC, HD 7407				
IC5	87-027-616-01	IC, TC4050BP				
% IC6	87-027-828-01	IC, TC9134P				
% IC8 € IC7,8,9,10	87-027-298-01	IC, CMOS4001 NOR				
IC11	87-027-840-01	IC, M54519P				
IC12,13	87-027-840-01	IC, TK10321				
IC12,13	87-027-823-01	IC, TC4069UBP				
) IC15	87-027-564-01	IC, CMOSTC4011PB				
IC16	87-027-371-01	IC, 4558DA				
IC17	87-027-678-01	IC, LM13600N				
Q5	89-318-155-01	Transistor, 2SC1815 (GR)				
Q6,7,14 17,18	89-304-582-31	Transistor, 2SC458(Q)				
Q8,9,11,12	89-406-555-01	Transistor, 2SD655E				
Q10,13	89-110-154-01	Transistor, 2SA1015 (Y)				
Q16	89-320-011-01	Transistor, 2SC2001 (K)				
Q15,19,20, 23,25	89-107-336-71	Transistor, 2SA733 (P,Q)				
Q21	89-405-712-06	Transistor, 2SD571 (L)				
Q24	89-408-804-01	Transistor, 2SD880 (Y)				
Q22	89-316-274-01	Transistor, 2SD1627 (Y)				
D12,13,14,	87-027-097-01	Diode, 1S1555				
15,16,17	(87-027-219-01)	(Diode, MA150)				
18,19,20,						
21,22,23,						
24,25,26,						
27,28,29,		i i				
30,31,33,						
34,35,36,						
37,38,39,						
40,41,42,						
43,44,45,						
46,47,48,						
53,54,59,						
60,61,62,						
63,64,72	07 007 005 04	D: 1, 05077D				
D32,51,52	87-027-365-01	Diode, S5277B				
D49,71	87-027-606-01	Zener diode, HZ7C2L				
D50	87-027-402-01	Zener diode, HZ242L				
D55	87-027-376-01	Diode, 1B4B41				
D56,57	87-027-364-01	Zener diode, HZ12A3L				
TH1	82-304-722-01	Thermister, 42D26				
TH2	87-026-178-01	Thermister, 250Ω				
X1	87-008-246-01	Ceramic resonator				
RY1	87-045-149-01	Relay, DC12V U				
J1,2,3,4	87-049-055-01	Pin jack, 4P (AUX, TUNER)				
J5,6	87-049-079-01	DIN socket, 5P (AMP, PHONO, TAPE)				
17	07 022 005 04					
J7	87-032-985-01	DIN socket, 8P				
J8	87-032-892-01	(DECK CONTROL) Jack, 2.5 ϕ				
	07-032-092-01	(PHONO, START/CUT)				
SFR1	87-021-616-01	Semi-fixed resistor, $100k\Omega$ -B				
SFR2	87-021-615-01	Semi-fixed resistor, 47kΩ-B				
SFR3	87-021-612-01	Semi-fixed resistor, $4.7k\Omega$ -B				
\		< Capacitor >				
∆C34	87-019-112-01	0.01µF Spark killer				
C23,28,29	87-015-935-01	0.22μF 12V Ceramic				
≪ FRONT C	IRCUIT BOAR	D SECTION >				
IC1	87-027-826-01					
IC2	87-027-298-01	IC, CMOS4001 NOR				
IC3	87-027-832-01	IC, TA7612AP				
01		Transistor 2SC1815 (GR)				

		MICOII DOM	ID OLUTION >
	IC1	87-027-826-01	IC, μPC1373H
(4)	IC2	87-027-298-01	IC, CMOS4001 NOR
	IC3	87-027-832-01	IC, TA7612AP
	Q1	89-318-155-01	Transistor, 2SC1815 (GF
	Q2,3,4	89-304-582-31	Transistor, 2SC458 (Q)
	D1	87-026-186-01	Photo diode, PIN PN313
	D2	87-027-543-01	LED, LN317GP

S9 ≪ AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1	87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT I odel only * 87-049-070-01 T CIRCUIT	
9 D10 D11 L1 S1,2,3,4, 5,6,7,8 C1,13 C6,7 C12	87-027-834-01 87-027-835-01 87-005-149-01 87-031-665-01 87-015-681-01 87-015-684-01 87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Indel only 87-049-014-01 87-035-139-01	LED, LN242RP LED ass'y, GL-109R1 Coil, 5mH Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) < Capacitor > 10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet circuit board
D11 L1 S1,2,3,4, 5,6,7,8 C1,13 C6,7 C12	87-027-835-01 87-005-149-01 87-031-665-01 87-015-681-01 87-015-684-01 87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Indel only 87-049-014-01 87-049-014-01 87-035-139-01	LED ass'y, GL-109R1 Coil, 5mH Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) < Capacitor > 10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet circuit board
L1 S1,2,3,4, 5,6,7,8 C1,13 C6,7 C12	87-005-149-01 87-031-665-01 87-015-681-01 87-015-684-01 87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Indel only 87-049-014-01 87-049-014-01 87-035-139-01	Coil, 5mH Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) < Capacitor > 10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION > Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION > Push switch (POWER) BOARD SECTION > AC outlet circuit board AC outlet circuit board AC outlet circuit board
S1,2,3,4, 5,6,7,8 C1,13 C6,7 C12	87-031-665-01 87-015-681-01 87-015-684-01 87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 T CIRCUIT Iodel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-035-139-01	Light tact switch (REMOTE, TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) < Capacitor > 10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
5,6,7,8 C1,13 C6,7 C12 ≪ JACK CIRC D58,65,66, 67,68,69 70 J9,10 ≪ SWITCH CI S9 ≪ AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" mc PCB-E J11,12	87-015-681-01 87-015-684-01 87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-049-014-01 87-035-139-01	TUNER, AUX. PHOTO, TAPE, DOWN, UP, MUTE) < Capacitor > 10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
C6,7 C12	87-015-684-01 87-015-677-01 87-015-677-01 87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Iodel only * 87-049-070-01 T CIRCUIT Inly * 87-049-014-01 87-035-139-01	10µF 16V Electrolytic 47µF 16V Electrolytic 100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
C6,7 C12	87-015-684-01 87-015-677-01 87-015-677-01 87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Iodel only * 87-049-070-01 T CIRCUIT Inly * 87-049-014-01 87-035-139-01	47μF 16V Electrolytic 100μF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
Syltan CI2 Syltan CIRC Syltan CIRC D58,65,66, 67,68,69 70 J9,10 Syltan CI Syltan CIRC Syltan	87-015-677-01 CUIT BOARD 87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Iodel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-049-014-01 87-035-139-01	100µF 6.3V Electrolytic SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
SWITCH CI S9 ≪ AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 ≪ AC OUTLE ="K","G" mc PCB-E J11,12	87-049-064-01 RCUIT BOARD 87-027-097-01 87-049-064-01 T CIRCUIT Iodel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-035-139-01	SECTION ≫ Diode, 1S1555 Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
D58,65,66, 67,68,69 70 J9,10 SWITCH CI S9 AC OUTLE E"H","HU" m PCB-E J11,12 AC OUTLE E"E" model or PCB-E J11,12 AC OUTLE E"K", "G" mc PCB-E J11,12	87-027-097-01 87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Iodel only * 87-049-070-01 T CIRCUIT inly * 87-049-014-01 87-035-139-01	Pin jack, 16P (TIMER, TUNER) RD SECTION ≫ Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
67,68,69 70 J9,10 ≪ SWITCH CI SS9 ≪ AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 ≪ AC OUTLE ="K","G" model PCB-E J11,12	87-049-064-01 RCUIT BOAI 87-031-687-01 T CIRCUIT Iodel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-035-139-01	Pin jack, 16P (TIMER, TUNER) RD SECTION Push switch (POWER) BOARD SECTION AC outlet circuit board AC outlet BOARD SECTION AC outlet circuit board
J9,10 ≪ SWITCH CI ,S9 ≪ AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" model PCB-E J11,12	RCUIT BOAI 87-031-687-01 T CIRCUIT I odel only 87-049-070-01 T CIRCUIT nly 87-049-014-01 87-035-139-01	RD SECTION > Push switch (POWER) BOARD SECTION > AC outlet circuit board AC outlet BOARD SECTION > AC outlet circuit board
AC OUTLE ="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" model PCB-E J11,12	87-031-687-01 T CIRCUIT Indel only 87-049-070-01 T CIRCUIT Inly 87-049-014-01 87-035-139-01	Push switch (POWER) BOARD SECTION ≫ AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
="H","HU" m PCB-E J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" model PCB-E J11,12	87-049-014-01 87-049-014-01 87-035-139-01	AC outlet circuit board AC outlet BOARD SECTION ≫ AC outlet circuit board
PCB-E J11,12 AC OUTLE ="E" model or PCB-E J11,12 F1 AC OUTLE = "K", "G" model PCB-E J11,12	* 87-049-070-01 T CIRCUIT hly * 87-049-014-01 87-035-139-01	AC outlet BOARD SECTION ≫ AC outlet circuit board
J11,12 ≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" me PCB-E J11,12	T CIRCUIT nly * 87-049-014-01 87-035-139-01	AC outlet BOARD SECTION ≫ AC outlet circuit board
≪ AC OUTLE ="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" model PCB-E J11,12	T CIRCUIT nly * 87-049-014-01 87-035-139-01	BOARD SECTION ≫ AC outlet circuit board
="E" model or PCB-E J11,12 F1 ≪ AC OUTLE = "K", "G" me PCB-E J11,12	87-049-014-01 87-035-139-01	AC outlet circuit board
PCB-E 3J11,12 F1 ≪ AC OUTLE = "K", "G" model APCB-E 3J11,12	* 87-049-014-01 87-035-139-01	
≪ AC OUTLE = "K", "G" mo APCB-E J11,12	87-035-139-01	
≪ AC OUTLE = "K", "G" mo		
= "K", "G" me PCB-E J11,12	97-009 020 04	Fuse, "T" 2.5A
= "K", "G" me PCB-E J11,12	07-030-020-01	Fuse label, "T" 2.5A
= "K", "G" me PCB-E J11,12	87-033-147-01	Fuse clamp
APCB-E AJ11,12		BOARD SECTION ≫
J11,12	*	AC outlet circuit board
≪ MISCELLAI	87-032-9 9 6-01	AC outlet
	NEOUS ≫	
1 T 1	86-197-602-01	Power transformer
		(H, HU model only)
711	86-197-604-01	Power transformer
\T1	00.407.557.5	(E model only)
111	86-197-605-01	Power transformer
7	87-034-956-01	(K, G model only) AC power cord
7	07-034-930-01	(H, HU model only)
4	87-034-877-01	AC power cord (E model only)
7	87-034-872-01	AC power cord (K model only)
7	87-034-892-01	AC power cord (G model only)
Z Z Z Z Z	87-031-617-01	Slide switch
·		(VOLTAGE SELECTOR)
		(H, HU model only)
7	87-085-165-01	Cord bushing
		/11 1111 1 - 1 1 - 1
7	97.095 1 <i>66</i> 01	(H, HU model only)
	87-085-166-01	(H, HU model only) Holder, AC power cord (E.K.G model only)

Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

RC-T500

WIRING (POWER SECTION = E,K,G MODEL)

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to follow-

С

D

Ε

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.

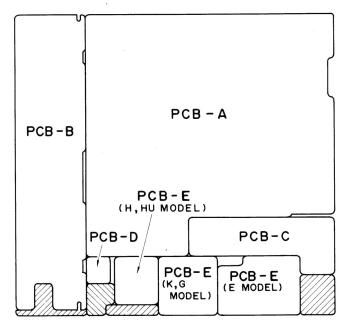
- 2. To use solder iron less than 40W (less than 260° C) of power consumption for soldering. But do not overheat more than 10 second.
- 3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
- 4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (4)).

Note; Combination Circuit Board

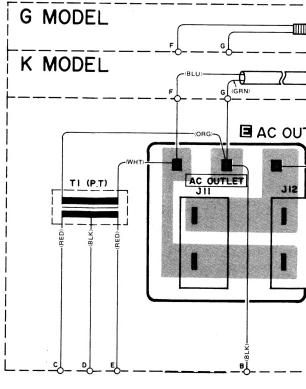
C-MOS IC handling precaution

The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.

Combination circuit board 86-197-610-01



E MODEL JII AC OUTLET JI2



AC OUTLET C.B

							RC-R50	OH,HU,E	,K,G
WIRING (POWER	SECTION = E	,K,G MODEL)	1 -	1	1 -			1
1	2	3	4	5	6	7		8	

	dling precaution 's construction makes this part susceptible to damage
by static elect ing articles.	ricity and so take sufficient care in regard to follow-
	put on conductive sheet, to be put in a metallic box
and to be deposit.	wrapped by aluminium foil for transportation and
•	der iron less than 40W (less than 260° C) of power
consumption	n for soldering. But do not overheat more than 10
second.	form a conductivity test with a tester, etc. Refer to
	voltages of each part.
	n the electrical parts which are indicated by an C
MOS IC syr	nbol mark (🏈).
Note; Combi	nation Circuit Board
	the electrical parts list which are indicated by an
	re supplied as one single combined circuit board. y will not be supplied separately. If this becomes
	se order the entire circuit board.
Combination	circuit board 86-197-610-01
ν	
	ل
	<u>l</u>
	PCB - A
PCB-B	1 00 7
. 05 5	
Į	PCB-E (H, HU MODEL)
	(11,110 MODEL)
	PCB-D PCB-C
r	
Į	/ PCB-E PCB-E
	(K,G MODEL) (É MODEL)
	4\\\\

Symbol No.	Part No.	Description		
D3,4	87-027-097-01	Diode, 1S1555		
D5,6,7,8	87-027-542-01	LED, LN217RP		
9				
D10	87-027-834-01	LED, LN242RP		
D11	87-027-835-01	LED ass'y, GL-109R1		
L1	87-005-149-01	Coil, 5mH		
S1,2,3,4,	87-031-665-01	Light tact switch (REMOTE,		
5,6,7,8		TUNER, AUX. PHOTO,		
		TAPE, DOWN, UP, MUTE)		
		< Capacitor >		
C1,13	87-015-681-01	10μF 16V Electrolytic		
C6,7	87-015-684-01	47μF 16V Electrolytic		
C12	87-015-677-01	100μF 6.3V Electrolytic		
√ IVCK CIT	' RCUIT BOARD	 SECTION ≫		
D58,65,66,	87-027-097-01			
67,68,69	87-027-097-01	Diode, 131333		
70				
J9,10	87-049-064-01	Pin jack, 16P (TIMER, TUNER)		
A	CIRCUIT BOA	RD SECTION ≫		
<u> </u>	87-031-687-01	Push switch (POWER)		
≪ AC OUTI	I Et circuit i	」 BOARD SECTION≫		
="H","HU"	model only			
⚠ PCB-E	*	AC outlet circuit board		
⚠ J11,12	87-049-070-01	AC outlet		
≪ AC OUTL ="E" model PCB-E		BOARD SECTION ≫ AC outlet circuit board		
⚠ J11,12	87-049-014-01	AC outlet		
⚠ F1	87-035-139-01	Fuse, "T" 2.5A		
A	87-098-020-01	Fuse label, "T" 2.5A		
$\Delta \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	87-033-147-01	Fuse clamp		
* = "K", "G"		BOARD SECTION ≫		
PCB-E	*	AC outlet circuit board		
<u> </u>	87-032-996-01	AC outlet		
、≪MISCELL	I ANFOLIS≫			
/ f \	86-197-602-01	Power transformer		
	00 107 002 01	(H, HU model only)		
<u> </u>	86-197-604-01	Power transformer		
		(E model only)		
⚠ T1	86-197-605-01	Power transformer		
		(K, G model only)		
\triangle	87-034-956-01	AC power cord		
<u>^</u>		(H, HU model only)		
△	87-034-877-01	AC power cord (E model only)		
<u> </u>	87-034-872-01	AC power cord (K model only)		
<u> </u>	87-034-892-01	AC power cord (G model only)		
↑ ↑ ↑ ↑ \$10	87-031-617-01	Slide switch		
		(VOLTAGE SELECTOR)		
<u>^</u>	07.005.155.5	(H, HU model only)		
<u>ن</u> ک	87-085-165-01	Cord bushing		
<u>^</u>	07 00F 106 01	(H, HU model only)		
4	87-085-166-01	Holder, AC power cord		
	86-198-800-01	(E.K.G model only) Remote control transmitter,		
	00-190-000-01	RC-T500		
^				

5 (GR)

E 5 (Y) 1 (K)

(L) (Y) 7 (Y)

TUNER)

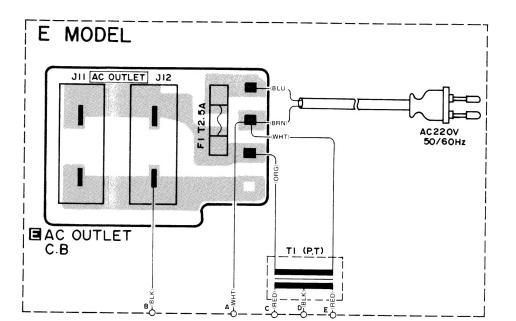
CUT) 100kΩ-B 47kΩ-B 4.7kΩ-B

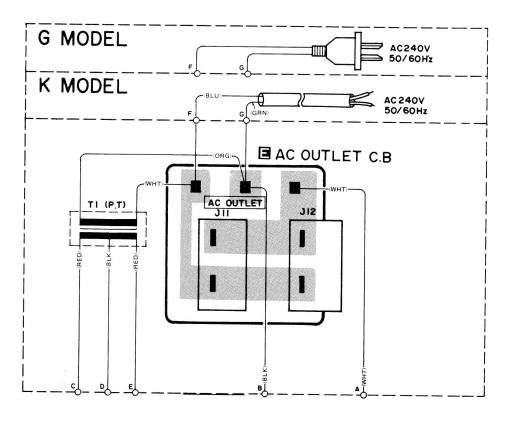
ark killer ramic

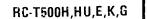
5 (GR) (Q)

N313

Safety component symbol
This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.





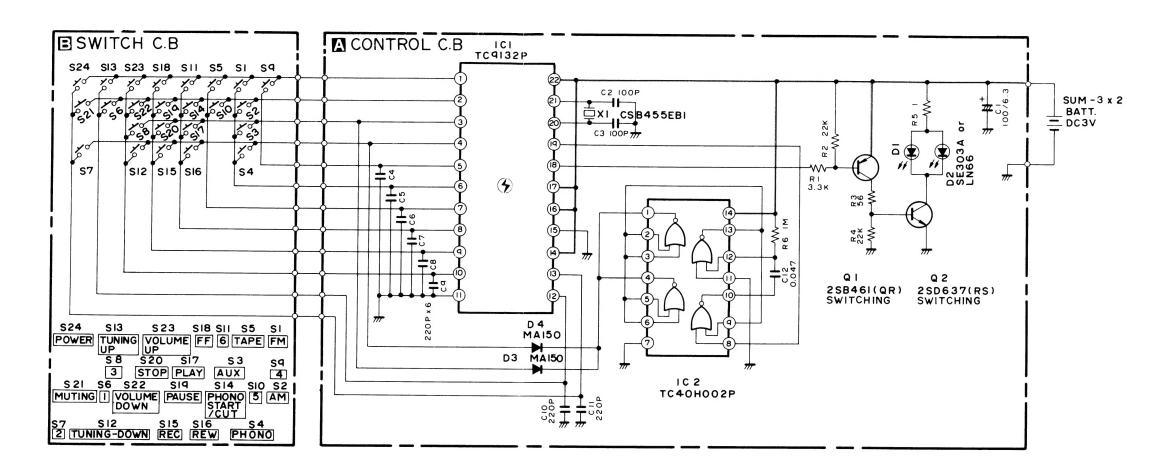


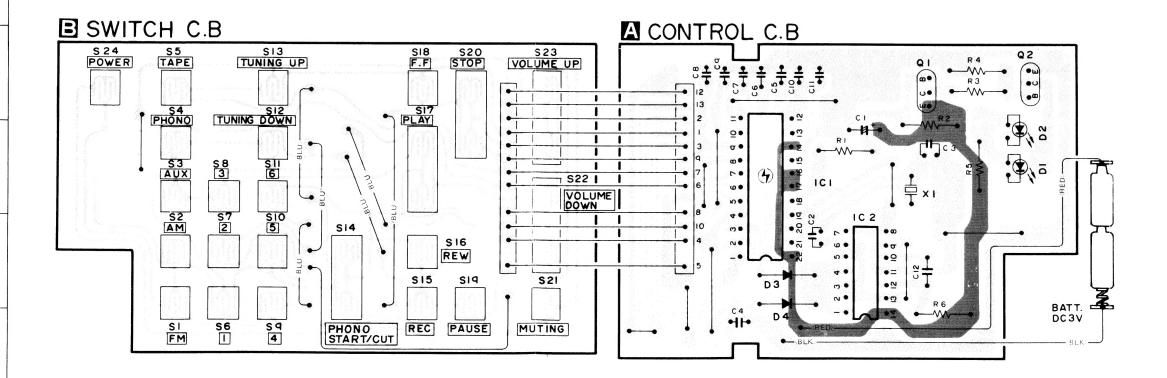
D

RC-T500H,HU,E,K,G RC-T500H,HU,E,K,G

SCHEMATIC DIAGRAM, WIRING

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 13





NOTES:

- 1) B (+) power supply
- Resistors with no designation have a rated power 1/4W and a tolerance of ±5%.
- Capacitors with no designation have a dielection strength of less than 50WV.
- 4) The only capacitor tolerance indicated are +5% and +10% (K).
- This schematic diagram is subject to change within notice in the interests of improved performance

NOTES (1) B(+) Pattern Others patte

(2) The voltage is the reference value meas (20 K ohms/V DC) when there are no

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible by static electricity and so take sufficient care in regarding articles.

- Need to be put on conductive sheet, to be put in a mand to be wrapped by aluminium foil for transport deposit.
- To use solder iron less than 40W (less than 260 C) consumption for soldering. But do not overheat mo second.
- Do not perform a conductivity test with a tester, etc the circuit voltages of each part.
- 4. The ICs on the electrical parts which are indicated MOS IC symbol mark (🏈).



RC-T500H,HU,E,K,G RC-T500H,HU,E,K,G

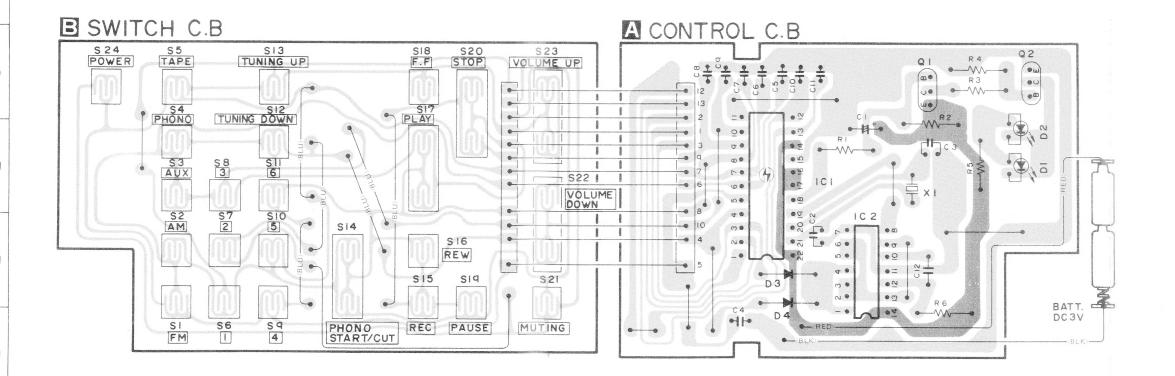
SCHEMATIC DIAGRAM, WIRING

1 2 3 4 5 6 7 8 9 10 11 12 13

A CONTROL C.B ESWITCH C.B S24 SI3 S23 SI8 SII S5 SI S9 C2 100P XI CSB455EBI SUM -3 x 2 BATT. = DC3V S12 S15 S16 54 (4) QI 2SB461(QR) 2SD637(RS) D4 S23 S18 S11 S5 S1 S13 MAI50 POWER TUNING VOLUME FF 6 TAPE FM UP UP S 8 S 20 S 17 D3 MAI50 S9 4 S 21 S6 S22 S19 S14 S10 S2

MUTING I VOLUME PAUSE PHONO 5 AM

START START S10 S2 1C 5 TC40H002P /CUT S7 SI2 SI5 SI6 S4
[2] TUNING-DOWN REC REW PHONO



NOTES:

- 1) B (+) power supply
- 2) Resistors with no designation have a rated power 1/4W and a tolerance of $\pm 5\%$.
- Capacitors with no designation have a dielecti strneght of less than 50WV.
- 4) The only capacitor tolerance indicated are $\pm 5\%$ (and $\pm 10\%$ (K).
- This schematic diagram is subject to change without notice in the interests of improved performance.

NOTES (1) B(+) Pattern Others patte

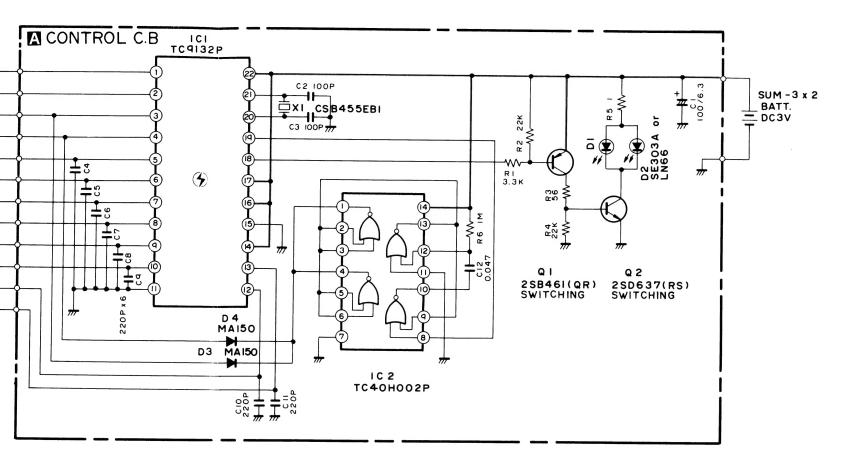
(2) The voltage is the reference value mea (20 K ohms/V DC) when there are no

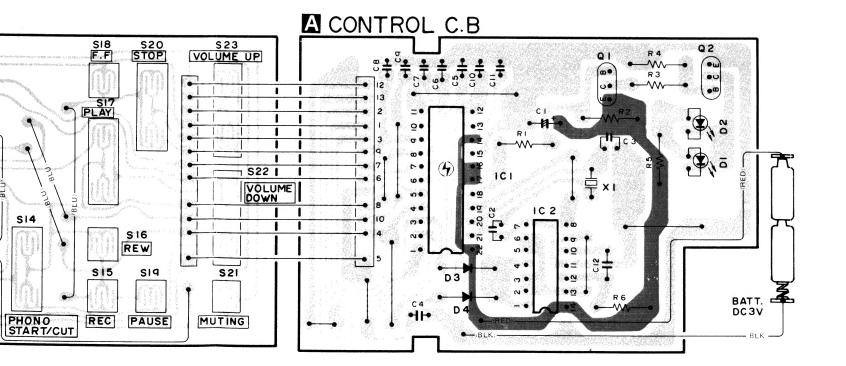
C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible by static electricity and so take sufficient care in regarding articles.

- Need to be put on conductive sheet, to be put in a m and to be wrapped by aluminium foil for transport deposit.
- To use solder iron less than 40W (less than 260°C) consumption for soldering. But do not overheat mo second.
- 3. Do not perform a conductivity test with a tester, etc. the circuit voltages of each part.
- 4. The ICs on the electrical parts which are indicated MOS IC symbol mark (🏈).

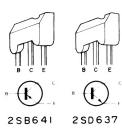
4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13





NOTES:

- 1) B (+) power supply
- 2) Resistors with no designation have a rated power of 1/4W and a tolerance of $\pm 5\%$.
- Capacitors with no designation have a dielectire strneght of less than 50WV.
- 4) The only capacitor tolerance indicated are $\pm 5\%$ (J) and $\pm 10\%$ (K).
- This schematic diagram is subject to change without notice in the interests of improved performance.



NOTES (1) B(+) Pattern Others pattern

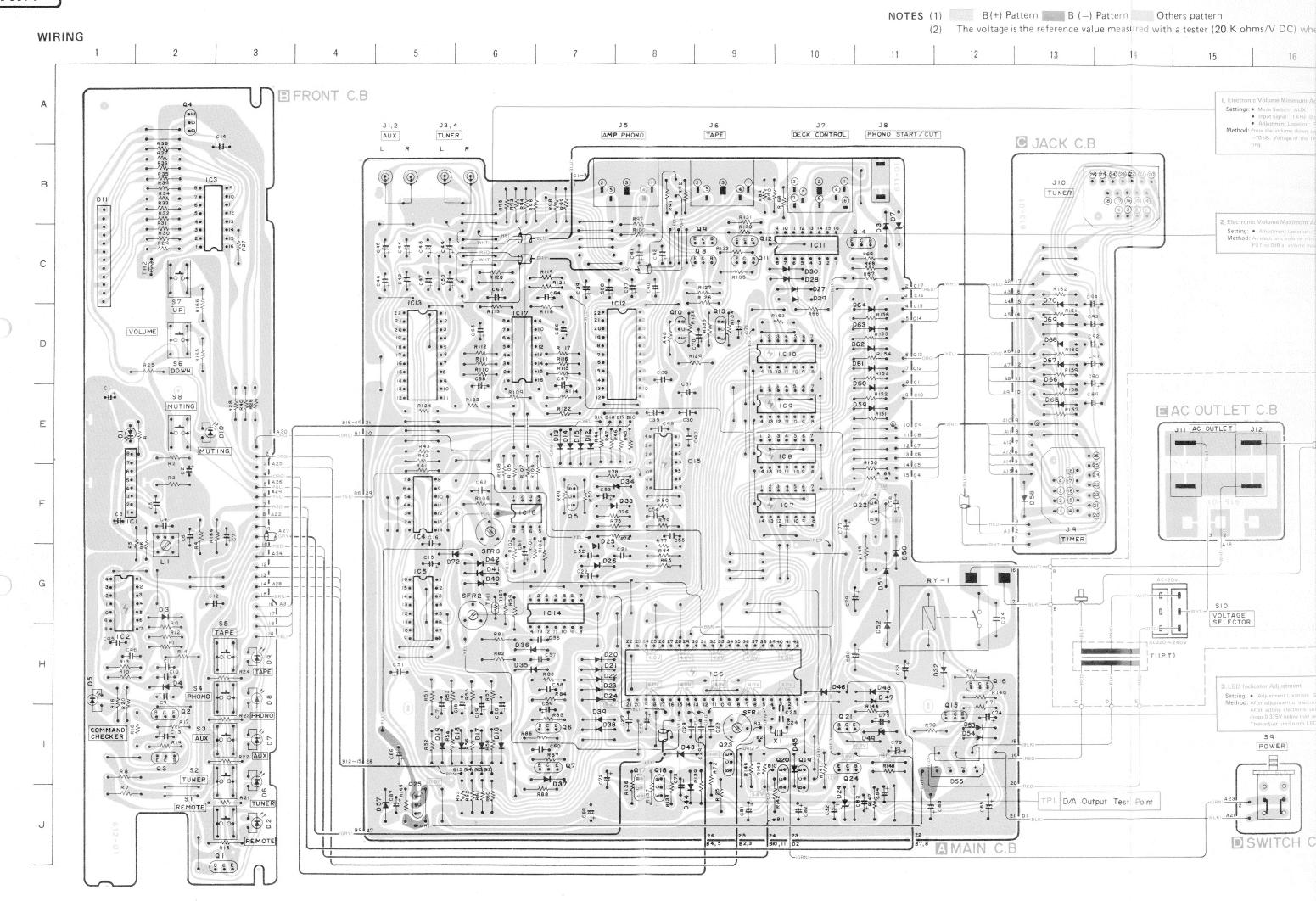
(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

- Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
- To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
- 3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
- The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (

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NOTES (1) B(+) Pattern B (-) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

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MOS IC symbol mark (4)).

14

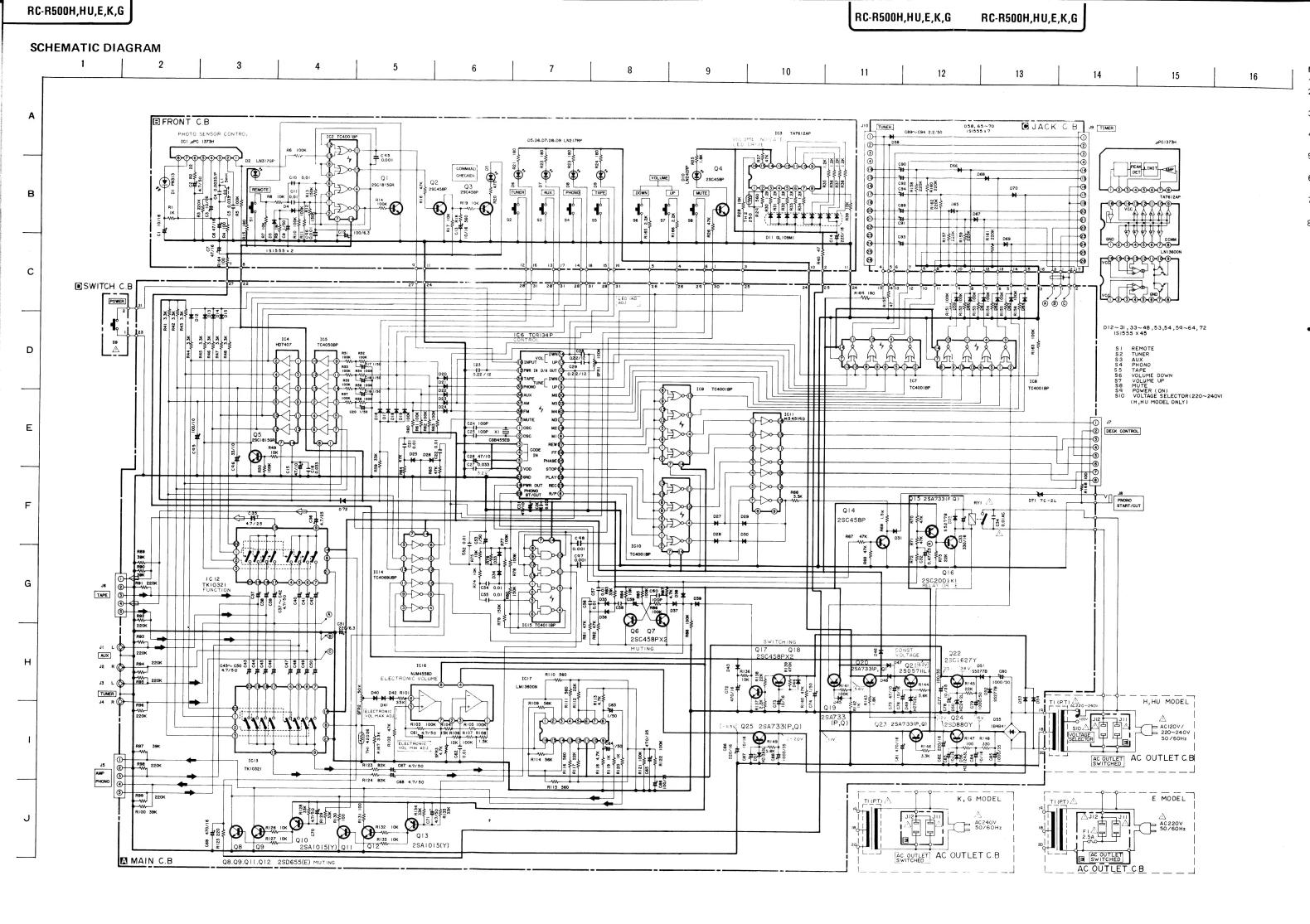
EFRONT C.B Settings:

Mode Switch: AUX
Input Signal: 1 kHz (0 dB at 1 V)
Adjustment Location: SFR 3

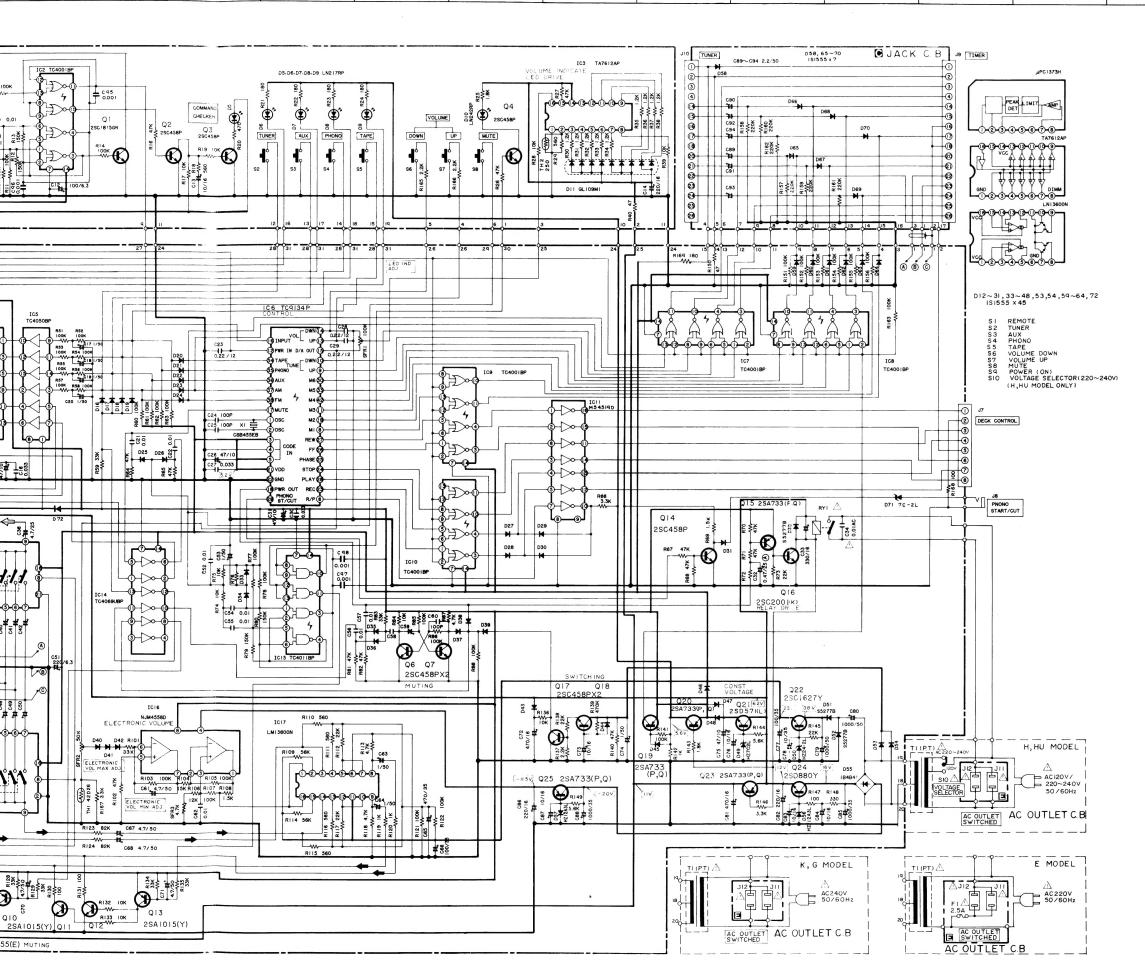
Method: Press the volume down switch, then move 3 steps from MIN setting, then set the output to J1,2 J3,4 J 5 PHONO START / CUT TUNER AMP PHONO TAPE DECK CONTROL AUX JACK C.B L R (0) 1 (1) TUNER 4320 Setting: . Adjustment Location: SFR 2 8 7 6 5 4 3 2 1 • • D30 RIII RIII RIII RIII RIII RIII ₽67 • ₩ • ► D28 C 63 A3 16 R162 • D29 A4 15 D70 C94
A5 14 D69 C93 1013 064 R156 ICI7 RII8 990 D63 200 190 1 2 3 4 5 6 7 D68 C92 D62 R112 5 • 4 • R111 • 3 • () IC10 17 • 16 • D61 14 13 12 11 10 9 8 D60 H 14 • 13 • 1 2 3 4 5 6 7 · H · R152 15 4 ica D54 RISI FAC OUTLET C.B All 8 B1 30 11108 1 2 3 4 5 6 7 — ACI20V/220∼240V 12 07 103 A1316 R150 14 C5 •4 IC15 A14 5 R169 15 C4 B• • 24 114 13 12 11 10 9 8 A154 ₽78 • ₩-•@ 10 • 23 1 1 2 3 4 5 6 7 R106 1 2 3 0 D 58 167 • (21) • 1 4 • 20 51016 14 13 12 11 10 4 8 c15 SFR3 • 2 • 3 • 4 • 5 • 6 • 7 SFR2 THE SE 1 2 3 4 5 6 7 C74) 1014 0 8 460 VOLTAGE SELECTOR 052 R81 14 13 12 11 ... C56 D35 1 57 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 D20 R73 R140 R140 R140 R140 R140 R140 -11-D22 D23 C 58 R84 C54 -HR85 R85 B C E Q6 D24 D34 038 D53 D54 R87 R87 B C E Q7 POWER D55 C-MOS IC handling precaution The C-MOS IC's construction makes this part susceptible to damage C 17 BI5 BI4 BI3 BI2 Q24 by static electricity and so take sufficient care in regard to follow-0 0 ing articles. 1. Need to be put on conductive sheet, to be put in a metallic box D/A Output Test Point and to be wrapped by aluminium foil for transportation and deposit. 2. To use solder iron less than 40W (less than 260°C) of power SWITCH C.B consumption for soldering. But do not overheat more than 10 AMAIN C.B second. 3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part. 4. The ICs on the electrical parts which are indicated by an C-

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NOTES:

- 1) B (+) power supply B (-) power supply
- 2) Signal path

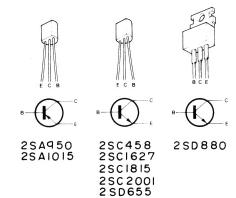
Rec path

- 3) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- 4) Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
- Capacitors with no designation have a dielectire strneght of less than 50WV.
- 6) The only capacitor tolerance indicated are $\pm 5\%$ (J) and $\pm 10\%$ (K).
- 7) Ceramic capacitor symbols:
- High dielectric constant system (YW, YP, YZ)
- 8) Explanation of symbols
 - Mylar capacitor

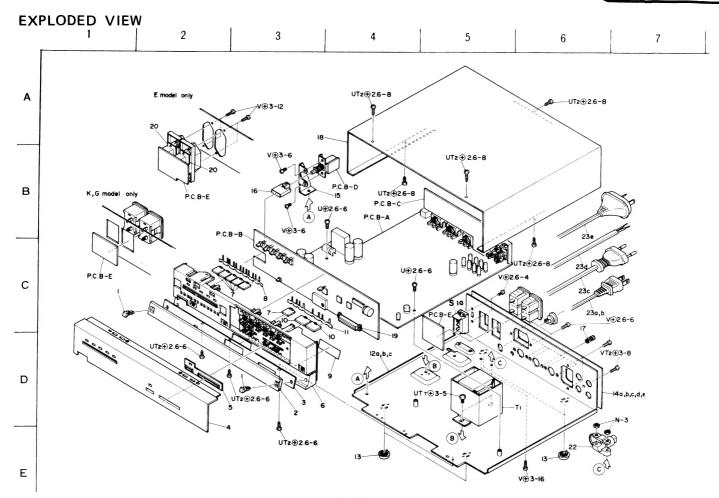
Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

 This schematic diagram is subject to change without notice in the interests of improved performance.







MECHANICAL PARTS

PARTS LIST

Ref. No.	Part No.	Part No. Chabged to	Description	Common Model	Q'ty	
1	82-769-010-01		Nylon rivet ass'y		2	
2	82-779-012-01		Window	ST-R80	1	
3	86-197-004-01		Plate	*	1	
4	86-197-001-01		Panel, Front D	*	1	
5	86-197-005-01		Guide, Button	*	1	
6	82-779-001-21		Cabinet, Front	ST-R80	1	
7	82-779-007-01		Push-key	ST-R80	6	
8	82-779-211-01		Plate spring A	ST-R80	1	
9	86-197-207-01		Sheet	*	1	
10	86-197-020-01		Push-key (GRY)	*	2	
11	82-770-212-01		Plate spring B	SA-A35	1	
12a	86-197-201-01		Chassis amp. ass'y D (H, HU model only)	*	1	
12b	86-197-203-01		Chassis amp. ass'y E (E model only)	*	1	
12c	86-197-205-01		Chassis amp. ass'y K (K, G model only)	*	1	
13	82-745-019-01		Foot		4	
14 a	86-197-007-01		Jack plate H (H model only)	*	1	
14b	86-197-008-01		Jack plate U (HU model only)	*	1	
14 c	86-197-009-01		Jack plate E (E model only)	*	1	
14d	86-197-010-01		Jack plate K (K model only)	*	1 1	
14e	86-197-012-01		Jack plate G (G model only)	*	1	
15	82-779-210-01		Holder, Power	ST-R80	1 1	
16	82-780-008-01		Push-button C	SA-C80	1	
17	87-085-102-01		Nylon rivet	57.1 555	6	
18	82-780-012-01		Cabinet, Steel	SA-C80	1	
19	86-197-208-01		Spacer VL	*	1 1	
20	82-773-216-01		Plate nut E (E model only)	AT-9500	2	
21	87-085-165-01		Cord bushing (H, HU model only)		1	
22	87-085-166-01		Holder, AC power cord (E, K, G model only)		1	
23a	87-034-934-01		AC power cord H (H model only)		1	
23ь	87-034-935-01		AC power cord U (HU model only)		1 1	
23c	87-934-877-01		AC power cord E (E model only)			
23d	87-934-872-01		AC power cord K (K model only)		1 1	
23e	87-034-892-01		AC power cord G (G model only)		1 1	

ACCESSORIES/PACKAGE=RC-R200

Ref. No.	Part No.	Part No. changed to	Description	Common Model	Q'ty	
1	86-199-855-01		Printed indiv , Packing	*	1	
2	86-199-852-01		Cushion L, Printed indiv.	*	1 1	
3	86-199-853-01		Cushion R, Printed indiv.	*	1	
4	87-051-171-11		Poly-vinyl sack		1	
5	86-199-904-01		Instructions booklet	*	1	
6	87-056-009-51		Distributors list (Y. YG model only)		1	
7 a	87-056-045-01		Guarantee card (YU model only)		1	
7 b	87-056-059-01		Guarantee card (YG model only)		1	
8	87-056-057-01		Service station list (YU model only)		1	
9	86-199-800-01		Remote control transmitter RC-T200	*	1	

ACCESSORIES/PACKAGE=RC-R500

Ref. No.	Part No.	Part No. Chabged to	Description	Common Model	Q'ty	
1	86-197-853-01		Printed indiv., Packing	*	1	
2	82-748-856-21		Cushion L, Printed indiv.	SA-C50	1	
3	82-748-857-31		Cushion R, Printed indiv.	SA-C50	1	
4	86-153-854-01		Auxiliary box		1	
5	87-051-131-11		Poly-vinyl sack (H, HU model only)		1	
6	87-051-135-11		Poly-vinyl sack		H,HU:1	
7	87-056-604-01		Poly-vinyl sack		E,K,G:2	
8a	86-197-904-01		Instructions booklet (H, HU model only)	*	1 1	
8b	86-197-905-01		Instructions booklet (E model only)	*	1 1	
8c	86-197-906-01		Instructions booklet (K model only)	*	1	
8d	86-197-907-01		Instructions booklet (G model only)	*	1	
9	87-051-171-11		Poly-vinyl sack		1 1	
10	87-056-008-11		Label, AC power cord (K model only)		1	
11	87-056-009-51		Distributors list (H,E,K,G model only)		1	
12a	87-056-045-01		Guarantee card (HU model only)		1	
12b	87-056-059-01		Guarantee card (G model only)		1	
13	87-032-845-01		Siemens plug (H, HU model only)		1 1	
14	87-056-057-01		Service station list (HU model only)		1	
15	85-439-002-01		Syncrate cord, CW-150K		1	
16	85-488-001-01		Connection cord, CW-250K		1	
17	85-489-001-01		Connection cord, CW-251AK, TO AMP		1 1	
18	85-489-002-01		Connection cord, CW-251BK, TO DECK	1	1	
19	85-493-001-01		Connection cord, CW-201K		1 1	
20	85-498-820-01		Connection cord, CW-206DSK		1 1	
21	86-198-800-01		Remote control transmitter, RC-T500		1	